**In the Claims:**

1. (currently amended) An implantable hearing device comprising: a vibrational assembly enclosed in a hermetic housing,

wherein said hermetic housing comprises a sealed end, wherein said sealed end comprises a wall; and ~~being adapted to be implanted in a human in the bone near the semicircular canals~~

wherein said vibrational assembly is configured to vibrate said hermetic housing and wherein said vibrational assembly comprises:

a) at least one controllable vibrating element, wherein said controllable vibrating element comprises:

i) a plurality of piezoelectric elements arranged in a stack, wherein said piezoelectric elements are configured to alternately expand and contract when a voltage is applied to said piezoelectric elements; and

ii) a plurality of electrically conductive bonding layers which are located between said piezoelectric elements in said stack, wherein said electrically conductive bonding layers serve to connect said piezoelectric elements mechanically and electrically in said stack; and

b) an inertial mass configured to vibrate in response to vibration of said controllable vibrating element.

2. (currently amended) The hearing device of claim 1 further comprising:

at least one microphone;

at least one hermetic housing containing control electronics ~~and/or~~ or a battery; and

a coil for receiving or sending data or power transcutaneously.

3. (cancelled)

4. (original) The hearing device of claim 2 further comprising at least one electrode array.

5. (cancelled)

6. (cancelled)

7. (currently amended) The hearing device according to claim [[5]] 1 wherein said ~~vibrating element consists of a~~ plurality of piezoelectric elements ~~that~~ are substantially disk-shaped, and are stacked with alternating polarities~~, and separated by electrically conductive bonding layers which serve to connect said elements mechanically and electrically~~.

8. (currently amended) The hearing device according to claim [[7]] 1 wherein said electrically conductive bonding layers extend beyond the outer circumference of said piezoelectric elements, thereby providing a contact pad for the attachment of wires, which serve to electrically connect said elements.

9. (currently amended) The hearing device according to claim [[7]] 1 wherein a pair of said electrically conductive bonding layers are joined by an electrically conductive link, wherein said pair of electrically conductive bonding layers are formed from ~~by bending~~ an etched metal clip that has been bent ~~to form the bonding layers and wire connecting alternating layers of the stacked piezoelectric elements~~.

10. (cancelled)

11. (cancelled)

12. (cancelled)

13. (cancelled)

14. (cancelled)

15. (cancelled)

16. (cancelled)

17. (currently amended) The hearing device according to claim [[5]]] 1 wherein said inertial mass is comprised of gold, platinum, iridium, lead, rhenium, or alloys thereof.

18. (currently amended) The hearing device of claim 1, said hermetic housing ~~having~~ further comprises a top that is flexible.

19. (currently amended) The hearing device of claim 18 wherein said ~~vibrational assembly comprises an interconnected~~ stack of piezoelectric elements ~~crystals~~ are connected to said flexible top.

20. (cancelled)

21. (original) The hearing device of claim 18, wherein said flexible top is composed of titanium, is about 10 to 100 microns thick, and has one or more ridges, in the form of concentric rings, which are impressed into said flexible top to increase flexibility.

22. (cancelled)

23. (cancelled)

24. (cancelled)

25. (cancelled)

26. (cancelled)

27. (currently amended) The hearing device of claim ~~5 or 18~~ 1 wherein said hermetic housing further comprises a base end, wherein ~~the base of said housing is connected to~~ a plurality of electrically insulated lead-throughs are disposed through said ~~housing~~ base end of said hermetic housing.

28. (currently amended) The hearing device of claim ~~5 or 18~~ 1 wherein said hermetic housing is comprised of titanium, or alloys thereof.

29. (currently amended) The hearing device of claim ~~5 or 18~~ 1 wherein said hermetic housing is substantially cylindrical in shape.

30. (currently amended) The hearing device of claim ~~5 or 18~~ 1 wherein said one or more grooves are formed in said wall of said hermetic housing, wherein said grooves are configured to help said hermetic housing osseointegrate into bone ~~housing contains one or more ridges and/or grooves that are radially or spirally disposed along the length of the outside cylindrical wall of said housing~~.

31. (currently amended) The hearing device of claim ~~5 or 18~~ 1 wherein said hermetic housing is at least partially coated with a substantially compliant material.

32. (original) The hearing device of claim 31 wherein said compliant material is silicone.

33-42. (cancelled).

43. (new) The hearing device of claim 1, wherein there are between 10 and 100 of said piezoelectric elements in said stack.

44. (new) The hearing device of claim 1, further comprising a plurality of wires, wherein at least one of said wires is attached to each of said electrically conductive bonding layers.

45. (new) The hearing device of claim 1, further comprising a base ring, a non-conductive insert and an interface element, wherein said base ring is attached to said wall of said hermetic housing, wherein said non-conductive insert is attached to said base ring, and wherein said interface element is attached to at least one of said electrically conductive bonding layers and said non-conductive insert.

46. (new) An implantable hearing device comprising: a vibrational assembly enclosed in a hermetic housing,

wherein said hermetic housing comprises a sealed end, wherein said sealed end comprises a wall, wherein one or more grooves are formed in said wall, and wherein said grooves are configured to help said hermetic housing osseointegrate into bone; and

wherein said vibrational assembly is configured to vibrate said hermetic housing.

47. (new) The hearing device of claim 46, wherein said grooves penetrate to about half or less of the thickness of said wall.

48. (new) The hearing device of claim 46, wherein said grooves have a width of about 0.05 to 0.2 mm.

49. (new) The hearing device of claim 46, wherein said grooves have a depth of about 0.05 to 0.2 mm.

50. (new) The hearing device of claim 46, wherein said grooves are radially disposed in said wall.

51. (new) The hearing device of claim 46, wherein said grooves are spirally disposed in said wall.

52. (new) The hearing device of claim 46, wherein said bone is the bone surrounding the otic capsule in a human.

53. (new) The hearing device of claim 46, wherein said bone is located between the lateral and superior semicircular canals in a human.

54. (new) An implantable hearing device comprising: a vibrational assembly enclosed in a hermetic housing,

wherein said hermetic housing is at least partially coated with a complaint material; and

wherein said vibrational assembly is configured to vibrate said hermetic housing, and wherein said vibrational assembly comprises: a) at least one controllable vibrating element, and b) an inertial mass configured to vibrate in response to vibration of said controllable vibrating element.

55. (new) The hearing device of claim 54, wherein said compliant material comprises silicone.

56. (new) The hearing device of claim 54, wherein said compliant material comprises a silicone derivative material.